



Examples of collaborators' support facilities for the AMS Center's verification tests are (from left) the U.S. EPA's National Risk Management Research Laboratory, DOE's National Energy Technology Laboratory, and NOAA's Center for Coastal Environmental Health and Biomolecular Research.

### AMS Center's support teams...

## Partners Have Provided Funds, Testing Support Staff, Host Sites

The value to the Advanced Monitoring Systems (AMS) Center of having willing partners and collaborators is clearly illustrated by six years of successfully planning and conducting verification tests of monitoring technologies. Through May 31, 50 technologies had been verified by the AMS Center and an additional 11 verification reports are in the final review process. The AMS Center is managed by Battelle in partnership with the U.S. EPA's Environmental Verification Technology (ETV) Program.

The AMS Center's collaborators and partners have come from states as far from each other as North Carolina and California. They are as different as the Electric Power Research Institute (EPRI) is from federal government-supported facilities, private sector testing laboratories, military facilities, or state, regional, and university centers.

The support provided by collaborators and partners has enabled the AMS

Center to conduct timely and cost-effective verification tests of technologies submitted. The collaborators/partners may provide financial support to help reduce the cost of the verification test to the U.S. EPA and participating vendors. They often provide access to their facilities. Their staff members may be assigned to support the AMS Center's verification test leaders in a variety of tasks, such as reviewing the verification test/QA plan, operating reference monitors, collecting reference samples, performing laboratory analyses, operating or observing the technology being verified under different operating or weather conditions, or assisting in preparing the draft test/QA plan or verification report.

Both the collaborators/partners and the AMS Center are benefiting from the alliances. For example, the collaborators/partners can add to their knowledge of environmental monitoring technologies. They can

obtain information about the verification process and have access to data collection methods and tests. Their contributions are acknowledged in AMS Center publications and verification test reports.

Here are examples of partners who have provided funding support, host sites, and technical services to the AMS Center during the verification testing process for the technologies listed:

- The Massachusetts Department of Environmental Protection (DEP), contributed funds for the mercury CEMs test.
- The New England Governors' Conference issued a resolution commending the U.S. EPA's ETV Program for accelerating the introduction of new technologies.
- EPRI contributed funds for an upcoming ammonia CEMs verification test.

*(See Support Teams on Page 2)*



**The AMS Center, which is part of the U.S. Environmental Protection Agency's Environmental Technology Verification Program, verifies the performance of technologies that monitor for contaminants and natural species in air, water, and soil. ETV was established to accelerate the implementation of improved environmental technologies through third-party verification testing and reporting of the technologies' performance. The ETV process provides purchasers and permittees with an independent assessment of the technology they are buying or permitting and facilitates multi-state acceptance. For further information, contact Helen Latham at Battelle, 505 King Ave., Columbus, Ohio 43201-2693; Phone 614-424-4062; Fax 614-424-5601; E-mail [lathamh@battelle.org](mailto:lathamh@battelle.org).**



## Water Security Stakeholder Committee Meeting

Twelve stakeholders, representatives from the U.S. EPA, and staff members from the AMS Center attended the second meeting of the Water Security Stakeholder Committee at the U.S. EPA's Andrew W. Breidenbach Environmental Research Center in Cincinnati, Ohio, on May 14. U.S. EPA's Jonathan Herrmann presented the *U.S. EPA Water Security Plan*, which addresses the needs of the water industry, including all sizes of water systems. Ryan James, the AMS Center's verification test coordinator for the cyanide test of six technologies, described the testing process. The test began in November 2002 and was completed by the end of April 2003. The next water security verification test will examine rapid toxicity technologies.

## Support Teams *(from Page 1)*

- The U.S. EPA's SuperSite in Fresno, CA, hosted a verification test of the ambient fine particulate monitors.
- The U.S. Department of Energy's (DOE) National Energy Technology Laboratory (NETL) in Pittsburgh, Pa., provided a site and staff to support the verification testing of 13 ambient fine particulate monitors. Representatives of NETL and the U.S. EPA also participated in a Technology Field Day to launch the testing.
- DOE's Toxic Substances Control Act Incinerator (TSCAI) in Oak Ridge, TN, was the host site for a mercury CEM verification test.
- The U.S. Army's Construction Engineering Research Laboratory's demilitarization incinerator in Tooele (UT) hosted a multi-metals CEM test.
- Biomolecular Research (CCEHBR), Charleston, NC, served as the host site for testing multi-parameter water probes.
- A water treatment facility managed by the Columbus, Ohio's Division of Water provided the host site for testing on-line turbidimeters.
- The U.S. EPA's National Risk Management Research Laboratory (NERL), Research Triangle Park, NC, Technology Field Day, provided a test site for the verification of continuous emission monitors (CEMs) for mercury.

**Note:** Verification tests underway or completed are no longer listed in each issue of *The Monitor* because of space limitations. Final verification test reports and verification statements are posted on the ETV Web Site at <http://www.epa.gov/etv>. The AMS Center can be accessed directly at <http://www.epa.gov/etv/centers/center1.html>.

## Air, Water Verification Tests Being Planned

**Ambient ammonia sensors.** Ten vendors have indicated interest in participating in this verification category. Partnering organizations are also being sought. The test is expected to be conducted during September and October. Contact Ken Cowen, 614-424-5547 or [cowenk@battelle.org](mailto:cowenk@battelle.org).

**Ammonia continuous emission monitors (CEMs).** Several vendors are expected to participate in the verification test of technologies that detect ammonia "slip" emissions. Testing will begin in July at AEP's Mountaineer coal-fired power plant. The Electric Power Research Institute (EPRI) is collaborating with Battelle on the test. Contact Ken Cowen, 614-424-5547 or [cowenk@battelle.org](mailto:cowenk@battelle.org).

**Multi-parameter water probes.** A second round of testing for this technology category is planned for this summer. Four vendors are expected to participate in the test, which is to begin in September. Other interested vendors should contact Jeff Myers, 614-424-7705 or [myersjd@battelle.org](mailto:myersjd@battelle.org).

**Portable water analyzers for arsenic.** A third round is being planned for this verification test, which will be conducted in fresh water and drinking water in Duxbury, MA. Vendors interested in participating should contact Patricia White, 781-952-5279 or [whitepj@battelle.org](mailto:whitepj@battelle.org).

**Rapid toxicity monitors.** Seven vendors with a total of nine technologies have indicated interest in participating in the verification test, which will be conducted during July and August at water sources in central Ohio. Contact Ryan James, 614-424-7954 or [jamesr@battelle.org](mailto:jamesr@battelle.org).

**Real-time ambient particulate monitors.** Four vendors with six technologies have expressed interest in participating in the second round of testing, which is to begin in August. Other vendors are being contacted. Light scattering devices will be included in this test. Interested vendors should contact Darrell Joseph, 614-424-3645 or [josephd@battelle.org](mailto:josephd@battelle.org).

**Test kits for pesticides in water.** Several vendors have indicated interest in participating in this verification test, which is scheduled for September. For information, contact Patricia White, 781-952-5279 or [whitepj@battelle.org](mailto:whitepj@battelle.org).